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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,471	06/23/2003	Jeffry Arnold LeBlanc	STL 3244	2653
36521	7590	12/08/2005	EXAMINER	
MOSER, PATTERSON & SHERIDAN LLP/ SEAGATE TECHNOLOGY LLC 595 SHREWSBURY AVENUE SUITE 100 SHREWSBURY, NJ 07702			KRAUSE, JUSTIN MITCHELL	
			ART UNIT	PAPER NUMBER
			3682	

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/602,471

Applicant(s)

LEBLANC ET AL.

Examiner

Justin Krause

Art Unit

3682

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 6, 10, 11 and 15-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 9 and 12-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I drawn to a fluid dynamic bearing motor and the species of Figure 3 in the reply filed on October 21, 2005 is acknowledged.
2. Claims 7, 8 and 17-20 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species (7 and 8) and invention (17-20), there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on October 21, 2005.
3. Claims 6, 10, 11, 15 and 16 are withdrawn from further consideration as being drawn to a nonelected species. Claim 6 appears to read on figure 2 rather than the elected figure 3. Claims 10, 11, 15 and 16 appear to read on figures 4 and 5 rather than elected figure 3.

Information Disclosure Statement

4. No information disclosure statement was filed.

Drawings

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the axial portion of the set of grooves must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

7. The abstract of the disclosure is objected to because "A fluid dynamic bearing motor is provided comprising" is language that can be implied, also "said gap" is improper language for use in the abstract. Correction is required. See MPEP § 608.01(b).

8. The disclosure is objected to because of the following informalities: paragraph 0025 contains a blank underlined space. The sentence is unfinished and it is unknown what the pattern's apex is greater than the length of.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 2, 3, 10, and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant is advised to correct all claims for numerous grammatical errors, which render the claims unclear as well as instances of antecedent basis. Some examples include but are not limited to:

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Claim 2: "across from at last an axial portion" is unclear. It is unclear what the axial portion of the grooves is and where it is located in relation to the step.

Claim 3: "the base of the shaft" lacks antecedent basis.

Claim 10 and 11: "the one step" lacks antecedent basis.

Claim 14: "the regulating means" lacks antecedent basis.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claim 1-5 and 9, as best understood is rejected under 35 U.S.C. 102(b) as being anticipated by Sakatani et al. (US Patent 5,046,863).

Sakatani discloses a fluid dynamic bearing system comprising:

- A stationary sleeve (12)
- A rotating shaft (13) axially disposed through the sleeve
- A journal gap between the shaft and the sleeve, defined by first and second interfacial surfaces of the shaft and sleeve (see Fig 1)
- At least one set of fluid dynamic grooves (15) formed on the first interfacial surface of the journal gap

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- At least one step (12) defined on the second interfacial surface on the journal gap.

Regarding claim 2, the step is defined across from at last an axial portion of the set of grooves. Step is being interpreted as a change in diameter of the first or second interfacial surfaces.

Regarding claim 3, the fluid dynamic grooves are asymmetric (15A,15B)

Regarding claim 4, the at least one step comprises a circumferential raised surface on the second interfacial surface.

Regarding claim 5, the at least one step is opposite and offset axially from the at least one set of fluid dynamic grooves.

Regarding claim 9, the first interfacial surface of the gap comprises the inner diameter of the sleeve and the second surface comprises the outer diameter of the shaft.

13. Claims 12-14, as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by Moritan et al (US Patent 5,715,116).

Moritan discloses a fluid dynamic bearing motor comprising:

- A stationary sleeve (21)
- A shaft and hub rotatable in relation to the sleeve (12 and 11)
- A journal defined between the sleeve and the shaft (see Fig 1c, the area defined between 12 and 21)
- A fluid bearing means between the sleeve and the shaft (Col. 7, lines 43-46)

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- A pressure regulating means (groove in sleeve 21, see fig. 1b) cooperating with the bearing means to maintain proper axial alignment of the shaft and hub with the sleeve.

Regarding claim 13, the fluid bearing means comprises at least one set of fluid dynamic grooves (12a) formed on a first surface defining the journal and fluid in the journal (Col 7, lines 43-46).

Regarding claim 14, the regulating means comprises at least one step (groove in sleeve 21) formed in the second surface defining the journal and is disposed at least in part across the journal from at least one set of fluid dynamic grooves.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 2001/0022869 shows a fluid bearing with fluid dynamic grooves and a step.

4,797,009 shows a fluid bearing with fluid dynamic grooves and a step.

5,988,887 shows a fluid bearing with fluid dynamic grooves and a step.

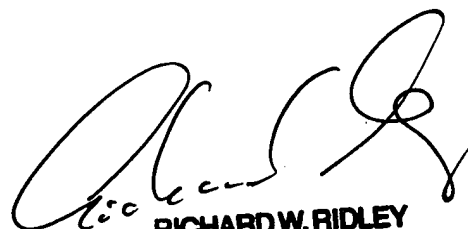
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Krause whose telephone number is 571-272-3012. The examiner can normally be reached on Monday - Friday, 7:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMK

11/30/05


RICHARD W. RIDLEY
PRIMARY EXAMINER

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